

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF OHIO  
EASTERN DIVISION**

**IN RE: EAST PALESTINE TRAIN DERAILMENT**

Case No. 4:23-CV-00242-BYP

JUDGE BENITA Y. PEARSON

**MEMORANDUM IN SUPPORT OF THIRD-PARTY PLAINTIFFS NORFOLK  
SOUTHERN CORPORATION AND NORFOLK SOUTHERN RAILWAY COMPANY'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT AGAINST OXYVINYLS LP**

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## **INTRODUCTION**

Norfolk Southern has been on the ground in East Palestine since the moments after the February 3, 2023 derailment, and its steadfast commitment to making things right has never wavered. Norfolk Southern has paid hundreds of millions of dollars in remediation costs, set up assistance centers that have provided more than \$21 million in direct funds to individuals and businesses, and committed millions more for first responder training and equipment, drinking water system updates, park and school revitalization, local business support, and other community development. On top of that and as relevant to this third-party case, Norfolk Southern has entered into a \$600 million settlement with Plaintiffs to resolve all their claims, including those asserted against OxyVinyls and the other railcar defendants. That settlement provides significant additional monetary relief to individuals and to help qualifying businesses continue to rebuild and grow. As the Court recognized, settlement class members “overwhelmingly support the settlement,” and this Court finally approved the settlement on September 27, 2024, finding it fair, adequate, and reasonable.

OxyVinyls, in stark contrast, has been absent from day one. OxyVinyls was the manufacturer and shipper of all the vinyl chloride in the derailed tank cars and the owner of three of those five derailed cars. Yet in the immediate aftermath of the derailment, OxyVinyls decided *not* to participate in the Unified Command that would decide how to address the risks posed by the five derailed tank cars full of OxyVinyls’s chemicals. Indeed, OxyVinyls—the purported expert in the chemical product at the center of the emergency response—directed its employees *not* to participate in any decision-making about how to address the emergency response and to make *no* recommendations about any approach.

Worse than that, OxyVinyls provided critical emergency response information that has since proved to be flatly wrong. In its “safety data sheet” or “SDS”—a federally required form

meant to convey reliable and up-to-date information about the dangers that chemicals pose in the event of a disaster—OxyVinyls expressly and repeatedly warned of the danger that heat could make the vinyl chloride polymerize. In that event, the consequences would be violent and grave.

As just two of many examples, OxyVinyls’s SDS warns:

**PHYSICAL HAZARDS:** MAY MASS EXPLODE IN FIRE. EXTREMELY FLAMMABLE GAS. CONTAINS GAS UNDER PRESSURE, MAY EXPLODE IF HEATED. POLYMERIZATION CAN OCCUR.

\* \* \*

**Hazardous Polymerization:** Polymerization can occur. Exposure to the following conditions or mixtures with the following elements and materials can cause explosive or violent polymerization of VCM: Air, Sunlight, Excessive heat, Oxidizers, Catalytic metals, such as copper, aluminum and their alloys and certain catalytic impurities. Avoid elevated temperatures, oxidizing agents, oxides of nitrogen, oxygen, peroxides, other polymerization catalysts/initiators, air and sunlight.

SUF ¶¶ 9-10; SUF Ex. A; Ex. 1 (NS-CA-000003413, hereafter “SDS”) at 2, 10.<sup>1</sup>

After the derailment, five damaged tank cars full of OxyVinyls’s vinyl chloride were sitting in pool fires for hours, with intermittent spot fires continuing after that. These were precisely the conditions—“fire,” “excessive heat,” “elevated temperatures”—under which the SDS repeatedly warns “[p]olymerization can occur.” Polymerized vinyl chloride could block the devices that release pressure in the vinyl chloride tank cars, and increased pressure could lead to a devastating explosion, blasting shrapnel and ignited chemicals throughout East Palestine. Contractors could obtain reliable temperatures from just one car, which measured at 130 degrees—substantially higher than the temperature that vinyl chloride should be when stabilized

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<sup>1</sup> Unless otherwise noted, “Ex. \_\_\_\_” citations reference exhibits to the Declaration of Alan Schoenfeld filed herewith, “SUF \_\_\_\_” citations reference the parties’ Stipulation Regarding Uncontested Facts, Dkt. 585, emphasis is added, and objections are omitted for deposition citations.

for shipment. Yet the pressure relief valves on the tank cars had stopped activating, including in one car that had previously activated in a constant stream for over an hour. And emergency responders did not hear any vinyl chloride escaping from the damaged tank cars. In light of the unambiguous warnings in OxyVinyls's SDS, the facts on the ground indicated that unrelieved pressure was building inside the tank cars because heat was causing polymerization. Given the life-and-death consequences of an uncontrolled explosion, Norfolk Southern and its expert contractors recommended a vent and burn to release the vinyl chloride in a controlled manner. Unified Command unanimously agreed that this was the safest option considering the facts known to responders on the ground.

Through extensive discovery in this case, OxyVinyls has now admitted that its SDS—the federally mandated, principal source of truth for responders in any hazardous materials disaster—was wrong, and that heat alone does *not* cause polymerization. But rather than take responsibility for its errors, OxyVinyls has still provided nothing to the East Palestine community and has declined to contribute to the settlement.

There is no genuine dispute that OxyVinyls breached its duty to provide an accurate SDS, that the inaccuracies in that SDS were a proximate cause of the vent and burn, and that OxyVinyls's negligence has injured Norfolk Southern, which will pay far more than its fair share in settling all of Plaintiffs' claims through the \$600 million settlement that this Court finally approved. There will be other disputes that a jury will resolve at trial. But given the undisputed facts, the jury should be spared from having to decide core issues of duty, standard of care, breach, proximate causation, and injury. Those elements should be decided now, in Norfolk Southern's favor, leaving the allocation of fault for trial.

### **STATEMENT OF FACTS**

On Friday, February 3, 2023, at 8:54 pm, an overheated wheel bearing on Car 23, owned by third-party defendant GATX, caused Norfolk Southern Train 32N to derail in East Palestine, Ohio. Cars 26, 27, 28, 29, and 53 were among those that derailed. SUF ¶¶ 3-4; Ex. 2 (Wolf Opening Rep.) at 8. Each carried vinyl chloride monomer (“VCM” or “vinyl chloride”) that was manufactured and shipped by OxyVinyls. Ex. 3 (Hazardous Materials Group Chair’s Factual Report, hereafter “Hazmat Report”) at 9; Ex. 4 (McClellan Opening Rep.) at 20, 23. When responders arrived, pool fires had engulfed the tank cars carrying OxyVinyls’s VCM, four of which had derailed into a pile and were inaccessible because of fires from the surrounding railcars. Ex. 5 (Day Dep.) at 153:25-154:17. A Unified Command team formed by midnight, composed of local first responders and personnel from federal and state agencies, including the Ohio and U.S. Environmental Protection Agencies, Pennsylvania Department of Environmental Protection, Norfolk Southern Hazmat Team, Beaver County Hazmat Response Team, and other Ohio and Pennsylvania state officials and law enforcement. SUF ¶ 11; Ex. 6 (Lunsford Opening Rep.) ¶¶ 41, 43; *see also* Ex. 7 (McCarty Dep. Day 1) at 161:4-9. OxyVinyls did not participate in Unified Command. *See* SUF ¶ 15; Ex. 8 (S. Smith Dep.) at 242:18-24, 244:23-245:2, 246:9-14.

Norfolk Southern promptly contacted SPSI and SRS: two expert emergency response contractors with extensive experience responding to train derailments involving hazardous materials. SUF ¶ 12; Ex. 9 (NTSB Drew McCarty Interview) at 8:22-9:5; Ex. 6 (Lunsford Opening Rep.) ¶ 49. SPSI is a high-hazard specialty contractor with fire suppression capabilities. Ex. 6 (Lunsford Opening Rep. ¶ 49. Drew McCarty is SPSI’s owner, with 35 years of experience in emergency response, including VCM response. Ex. 7 (McCarty Dep. Day 1) at 11:4-14; 17:9-18:1, 469:23-25. McCarty “is well known and respected in the industry as an

expert in hazardous materials emergency response and spill remediation.” Ex. 6 (Lunsford Opening Rep.) ¶ 50. SRS is among “the best emergency response contractors in the industry,” with “a tremendous amount of experience and training.” Ex. 10 (Schoendorfer Dep.) at 260:11-22, 265:14-19. Chip Day, a Senior Project Manager at SRS, has significant experience with VCM, including derailments involving VCM. Ex. 6 (Lunsford Opening Rep.) ¶¶ 72-73; Ex. 5 (Day Dep.) at 14:8-11. OxyVinyls’s own Chemical Response Plan for incidents in transportation lists Chip Day, Drew McCarty, SRS, and SPSI as Designated Sources of Outside Assistance. *See* SUF ¶ 13; Ex. 11 (Brenon Dep., Ex. 2) at B-8–B-10. Experts from SPSI and SRS, including McCarty and Day, arrived on the scene shortly after the derailment. Ex. 9 (NTSB Drew McCarty Interview) at 8:22-9:1; Ex. 5 (Day Dep.) at 145:7-16; Ex. 7 (McCarty Dep. Day 1) at 327:5-13.

#### **I. VINYL CHLORIDE, POLYMERIZATION, AND OXYVINYLS’S SAFETY DATA SHEET**

VCM is a chemical manufactured and used to make polyvinyl chloride (“PVC”). Ex. 12 (Coates Opening Rep.) ¶ 23. It is transported in a pressurized liquid state to prevent contact with reactive agents like oxygen. *Id.* ¶¶ 33-36, 39. Under prolonged, intense heat, liquefied vinyl chloride turns to vapor and expands. *Id.* ¶¶ 43-48. Tank cars carrying pressurized gases like VCM are outfitted with a pressure relief device (“PRD”) to vent that vapor, relieving excessive pressure. SUF ¶ 5; Ex. 12 (Coates Opening Rep.) ¶ 42. Failure to release that excess pressure can cause pressure to build and the container carrying the VCM to explode. *Id.* ¶ 48. This reaction is called a “boiling liquid expanding vapor explosion” (“BLEVE”). *Id.* ¶ 48. A BLEVE can be devastating, launching tank shrapnel hundreds of feet or more into the surrounding area and broadly and uncontrollably releasing chemicals into the air. Ex. 6 (Lunsford Opening Rep.) ¶ 61.

Polymerization, a chemical process by which VCM turns into a solid, can lead to a BLEVE by blocking PRDs and preventing the release of excess pressure. Ex. 12 (Coates Opening Rep.) ¶¶ 122-123. Polymerization thus increases both the chances of a BLEVE occurring and the severity of the explosion given the increased pressure. *See id.* ¶¶ 122-123; Ex. 5 (Day Dep.) at 156:1-22.

The catastrophic risk of a BLEVE is not theoretical: in 1970, propane tank cars damaged in a derailment underwent a BLEVE, injuring firefighters and civilians; in 1973, responders were attempting to cool a propane tank car that had caught fire when the car exploded in a BLEVE, killing 11 volunteers and a state trooper and injuring 100 others; and in 2003, derailed tank cars of flammable liquids underwent a BLEVE, but, thanks to the advice of expert contractors, responders withdrew from the scene, preventing any casualties. Ex. 6 (Lunsford Opening Rep.) ¶ 61.

Under federal regulations imposing duties on hazardous materials shippers, *see* 49 C.F.R. § 172; 29 C.F.R. § 1210.1200(f)(5), (g)(6)(i-ii), OxyVinyls provided emergency response information in the bill of lading accompanying its shipment of VCM, which directed emergency responders to the safety data sheet (“SDS”) that OxyVinyls created as the manufacturer of the VCM. SUF ¶¶ 7-9; Ex. 13 (Beckner Dep.) at 92:6-8; Ex. 14 (Kelly Dep.) at 25:16-27:11; Ex. 6 (Lunsford Opening Rep.) ¶ 148. As required by law, that SDS included information about a range of emergency response issues, including firefighting, accidental release, and stability and reactivity, 29 C.F.R. § 1910.1200(g), as well as risks of fire or explosion and immediate methods for handling fires, 49 C.F.R. § 172.602(a). SUF ¶ 8. Per federal mandate, the SDS must “accurately reflect[] the scientific evidence used in making the hazard classification.” 29 C.F.R. § 1920.1200(g)(5), (6). Following the derailment, OxyVinyls provided its SDS for VCM to

emergency responders through Chemtrec, a platform responders use in emergency situations to obtain relevant SDSs to inform their decisions in responding to the derailment. SUF ¶ 9; Ex. 14 (Kelly Dep.) at 25:16-29:9; Ex. 6 (Lunsford Opening Rep.) ¶ 148.

OxyVinyls's SDS clearly and repeatedly states that VCM is capable of polymerization when exposed to heat. It provides 12 express warnings, emphasized through capital letters, bolded text, or sheer repetition. Such warnings include the all-caps "MAY MASS EXPLODE IN FIRE. ... MAY EXPLODE IF HEATED. POLYMERIZATION CAN OCCUR" as the second warning in the SDS's emergency overview, Ex. 1 (SDS) at 2, as well as more detailed explanations in the section titled "Stability and Reactivity," warning that VCM is "[g]enerally stable at normal temperatures and pressures," but "may violently polymerize ... when not stabilized and/or stored correctly," and that "[e]xplosive or violent polymerization can occur when exposed to ... excessive heat," *id.* at 10. The Stability and Reactivity warnings use the term "violent polymerization" or "violently polymerize" four times, and polymerization warnings also appear in the sections covering Hazards Identification, Precautionary Statements, Fire-Fighting Measures, and Handling and Storage. *See id.* at 2-4, 6, 8, 10. The SDS sums up its warnings without qualification: "**Hazardous Polymerization:** Polymerization can occur. Exposure to the following conditions or mixtures with the following elements and materials can cause explosive or violent polymerization of VCM: ... Excessive heat ...." *Id.* at 10.

#### **A. Abnormally Activated Pressure Relief Devices And Rising Temperatures**

For hours after the derailment, five tank cars full of VCM that OxyVinyls manufactured and shipped were sitting in pool fires. Ex. 6 (Lunsford Opening Rep.) ¶ 66. The protective housings that contained the PRDs and outtake valves were largely inaccessible because they were blocked by other, burning cars. Ex. 5 (Day Dep.) at 153:25-154:17. Fires continued from the night of the derailment on Friday, February 3, through Sunday, February 5, *id.* at 153:5-

154:17, “heating those [tank] cars, building internal pressure,” Ex. 7 (McCarty Dep. Day 1) at 180:15-17. The contractors were aware of “the data sheets” and so were concerned about the risk of polymerization, given that “these cars” were in “pretty serious fires.” *Id.* at 183:24-184:12. That concern grew when the PRDs on the VCM cars began releasing shortly after midnight the morning of Saturday, February 4, and continued through about midday, in the typical cycle of 30 seconds on (releasing) and two minutes off. *Id.* at 175:14-25; Ex. 5 (Day Dep.) at 174:15-22. The afternoon of February 4, hours after the nearby pool fire had extinguished, the PRD on Car 28 reactivated and continuously vented gas for about 70 minutes—far longer than the standard 30-second interval. Ex. 15 (Wood Dep.) at 129:13-19. This was “a telltale indicator that you have – you could have polymerization occurring.” Ex. 5 (Day Dep.) at 161:5-16; *see also* Ex. 7 (McCarty Dep. Day 1) at 110:15-111:2, 187:11-22. As Drew McCarty, the expert in hazardous materials response, testified:

[T]he third VCM car in from the east, frankly, scared the hell out of us. It released pressure in a violent, sudden, violent roar of fury, and it had been calmed for two hours prior to that ... . [T]here was something going on pressure building in that car without a fire under it. Okay? That’s a key part of our damage assessment with internal pressures that are unknown at that point. But what we can absolutely know is we observed them Friday night into Saturday, audibles, cycling, the sound in which they were releasing, that corresponds to some amount of internal pressure, it was exponentially worse and sustained for 70 minutes, and it had no fire under it for 90 minutes to two hours prior to that.

Ex. 16 (NTSB Hrg. Day 1) at 145:16-146:5.

Starting the afternoon of Sunday, February 5, contractors began to collect data on the temperature of the VCM tank cars. Ex. 7 (McCarty Dep. Day 1) at 214:5-16, 229:40-230:1, 231:6-233:19. Because VCM temperature and pressure are predictably correlated, accurate temperature readings can indicate whether the pressure inside a tank car has grown to dangerous levels. *See* Ex. 5 (Day Dep.) at 100:21-101:18; Ex. 7 (McCarty Dep. Day 1) at 130:15-20. But the thermometer wells normally used to directly measure the temperature of the interior of the

tank cars—avoiding the tank cars’ multiple protection and thermal isolation layers, as well as the external tank car jacket—were either damaged or otherwise inaccessible. Ex. 7 (McCarty Dep. Day 1) at 217:8-15, 218:6-221:9. Contractors therefore had to use far less reliable infrared thermal guns, which could only measure the temperature of the surface at which they were pointed. The VCM tank cars were jacketed—*i.e.*, insulated—with layers of steel and two inches of thermal insulation between the exterior and the product inside. *Id.* at 216:4-217:12, 218:6-221:9. As McCarty testified:

In all my travels and all my years of experience, I’m not familiar with any technology that’ll put a temperature through an eighth-inch outer steel jacket, through two inches of thermal protection, through two inches of insulation, to get through another tank wall thickness of the tank to get a product temperature. I’m not familiar with any such technology.

*Id.* at 216:4-12. The closest contractors could come to measuring the temperature of the interior of the tank cars was attempt to point the instruments through holes in any tank jackets to try to measure the temperature of the exterior of the tank itself.

Only one car, Car 53, had a significant tear in the external tank car jacket, which exposed the tank shell. Ex. 17 (Lunsford Rebuttal Rep.) ¶ 22; Ex. 18 (McCarty Dep. Day 2) at 508:4-21. On the afternoon of February 5, Norfolk Southern contractors used an infrared thermal gun to measure the temperature of the tank car shell through that tear. Ex. 7 (McCarty Dep. Day 1) at 246:24-247:21. Even though the pool fires had been extinguished for hours, the temperature of the tank shell was 135 degrees, and it increased to 138 degrees over the next hour. Ex. 7 (McCarty Dep. Day 1) at 247:6-23.<sup>2</sup> The temperature of the VCM inside the tank was likely much higher, as the temperature of the air that February day in Ohio was around 10 degrees, which would have affected the exposed tank shell, and there were several additional layers

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<sup>2</sup> All temperatures are in Fahrenheit.

between the tank shell and the interior of the tank car where the VCM was held. *See* Ex. 17 (Lunsford Rebuttal Rep.) ¶¶ 20-22; Ex. 6 (Lunsford Opening Rep.) ¶ 88. The PRD was not activated, and contractors did not hear the hissing sound that had previously been emanating from within the tank car, indicating that any excess pressure was not escaping. Ex. 18 (McCarty Dep. Day 2) at 523:1-23; Ex. 6 (Lunsford Opening Rep.) ¶ 78.

There were no comparable tears in the jackets of the other four cars carrying VCM through which Norfolk Southern contractors could get an accurate temperature reading of the tank shell. Ex. 18 (McCarty Dep. Day 2) at 506:22-507:7. Thermal-gun temperature readings of the other four cars showed very large temperature drops occurring very quickly—dramatic swings that ranged from unlikely to impossible as indicators of the temperature of the VCM inside the tank cars. Ex. 6 (Lunsford Opening Rep.) ¶¶ 88-89. The necessary pressure to trigger PRD activation correlated to a temperature of approximately 180 degrees. Ex. 8 (S. Smith Dep.) at 139:16-25; Ex. 6 (Lunsford Opening Rep.) ¶ 93; Ex. 19 (Lunsford Dep.) at 164:12-15. But just 12 hours after the PRDs were activating (indicating an internal temperature of 180 degrees), the thermal guns measured temperatures of just 65 to 67 degrees in four of the five cars. Ex. 6 (Lunsford Opening Rep.) ¶ 92; Ex. 17 (Lunsford Rebuttal Rep.) ¶ 20 & n.22. This rapid decrease in temperature was inconsistent with known temperature curves, meaning it was not plausible to believe that the VCM inside the tank cars had cooled at the rate suggested by the temperature readings obtained by the thermal guns. Ex. 6 (Lunsford Opening Rep.) ¶ 94. Instead, these measurements suggested the thermal guns were not measuring the temperature of the internal tank of the cars (much less the VCM inside the tanks), but rather at best the temperature of outer layers of insulation or thermal protection that were exposed to the 10-degree external air temperature. *Id.* ¶¶ 94-96. “Relying on these temperatures to calculate internal

pressures would have been a dangerous assumption that the internal pressure of the product was lower than it likely was.” Ex. 17 (Lunsford Rebuttal Rep.) ¶ 20. Other measurements confirmed that the thermal guns were not producing readings reliably indicating the temperature of the VCM inside the cars. Cars 28 and 29 measured 65 and 67 degrees at 1 am on February 6, then rose to 90 degrees and 115 degrees at 7 am, but somehow returned to 65 and 67 degrees just one hour later. Ex. 6 (Lunsford Opening Rep.) ¶ 92. The measurements of Car 53 were thus the only reliable temperature readings available to the contractors responding to the derailment. Ex. 17 (Lunsford Rebuttal Rep.) ¶ 22.

There was also significant reason to believe the damaged tank cars would explode at lower pressures (and correlated lower temperatures) than under normal circumstances. While DOT tank cars have a rated burst pressure that exceeds the pressure rating for a PRD, a tank car that has been compromised due to dents, gouges, scrapes, and burns has a lower pressure rating, and the derailment had caused precisely this type of damage to the derailed cars. Ex. 4 (McClellan Opening Rep.) at 73. Norfolk Southern contractors assessing potential BLEVE risks were thus facing very high and rising temperature readings from the only tank car where measurements were reliable, together with the unpredictably compromised structural integrity of the tank cars, and one tank car with a PRD that had abnormally vented for over an hour. Ex. 6 (Lunsford Opening Rep.) ¶¶ 95-101.

## **II. INCONSISTENT AND UNCERTAIN INPUT FROM OXYVINYLS**

Following the derailment, Norfolk Southern and its contractors were in regular communication with OxyVinyls representatives regarding OxyVinyls’s VCM, beginning in the early morning hours of February 4. Ex. 20 (Stegmann Dep.) at 73:7-14. Those representatives of OxyVinyls provided inconsistent and uncertain input, all the while refusing to provide any actual recommendations.

Norfolk Southern raised concerns about a potential BLEVE on a conference call with OxyVinyls's Dallas headquarters the evening of February 4. Ex. 20 (Stegmann Dep.) at 83:13-16. Karenanne Stegmann, OxyVinyls's Vice President of Supply Chain, expressed concern to Norfolk Southern about the BLEVE model, and whether a one-mile evacuation was sufficient. Ex. 20 (Stegmann Dep.) at 83:13-84:3; Ex. 21 (Wood 30(b)(6) Dep.) at 78:5-79:2. Stegmann told Norfolk Southern that OxyVinyls was concerned about the tank cars and the potential for polymerization. Ex. 22 (Hart Dep.) at 252:20-253:6. While discussing the potential for polymerization and a BLEVE, the OxyVinyls leadership team was "stunned," and Stegmann raised concern about a potential "uncontrolled catastrophic explosion." Ex. 20 (Stegmann Dep.) at 83:13-84:20, 124:4-24. Paul Thomas, OxyVinyls's Senior Vice President of Business Development, Technology, and Support, believed that polymerization was possible, albeit with a "low probability." Ex. 23 (Thomas Dep.) at 118:3-12. The following morning, Sunday, February 5, on another conference call with OxyVinyls's Dallas team, John Brenon, an OxyVinyls Senior Vice President of Manufacturing who was in Dallas, told responders that he believed polymerization was not occurring. Ex. 24 (Brenon Dep.) at 61:7-8, 125:17-21. Contractors asked Brenon "okay, if you don't believe it's polymerizing, what should we do." Ex. 7 (McCarty Dep. Day 1) at 158:14-159:2. Brenon said "[n]ot a word." Ex. 7 (McCarty Dep. Day 1) at 158:14-24.

While the Dallas team equivocated, OxyVinyls sent three representatives to the derailment scene—Steven Smith, Justin Cox, and Alejandro Torres, SUF ¶ 14; Ex. 24 (Brenon Dep.) at 50:2-11, none of whom was familiar with polymerization. Ex. 8 (S. Smith Dep.) at 121:25-122:7, 22:22-25, 26:10-21, 48:19-23, 49:14-50:5; Ex. 24 (Brenon Dep.) at 52:8-10; Ex. 25 (Torres Dep.) at 77:18-20. OxyVinyls instructed its employees not to participate in Unified

Command and to provide no recommendations as to any specific response. Ex. 26 (text message); Ex. 8 (S. Smith Dep.) at 84:6-13, 242:18-24, 244:23-245:2, 246:9-14. Specifically, OxyVinyls employees were given guidance by Carl Bronold: “The Oxy team also understands to be very clear in their role and not to be involved in managing or recommending any specific activities related to the response. Only to provide technical assistance and information.” Ex. 26 (text message); Ex. 24 (Brenon Dep.) at 48:18-49:2. Nonetheless, Smith expressed concern to Norfolk Southern and its expert contractors about the possibility of polymerization. Ex. 8 (S. Smith Dep.) at 144:5-22.

During a conversation with contractors, Smith “got a text that the temperature had risen on the westernmost car,” and “made the comment that it could possibly be polymerizing.” Ex. 8 (S. Smith Dep.) at 144:5-22. Cox similarly expressed to Torres and Smith: “Not sure we want to bring up [in command center] but just got report that [car 53] has increased 2°F since last reading ... Not sure if there is an odd ball reaction occurring, or polymerizing.” Ex. 27 (text message). The contractors on scene believed Cox was a “subject matter expert on emergency response to [OxyVinyls’s] products,” because “this is a gentleman that they’ve empowered as a corporation to run their Oxy strike team.” Ex. 7 (McCarty Dep. Day 1) at 154:7-13. And Cox “clearly communicated the same concern” about polymerization that the contractors shared. *Id.* at 154:13-14.

When they learned that Brenon had earlier told contractors that he did not think polymerization was occurring, the on-site OxyVinyls representatives were confused and in disbelief, Ex. 7 (McCarty Dep. Day 1) at 156:9-10; Ex. 5 (Day Dep.) at 332:13-16, and Justin Cox even said to the contractors, “I guess I’m going to have to go to Dallas and explain what the P”—meaning, polymerization—“on the [Department of Transportation] guidebook means.” Ex.

5 (Day Dep.) at 333:20-24. Brenon himself also expressed doubt behind the scenes. After telling responders that polymerization was not occurring, Brenon sent an internal email asking, “In the rare scenario that VCM could polymerize, do we have any sense on what sort of conversion we would get to.” Ex. 28 (John Tummons Email to John Brennon). Other OxyVinyls employees likewise expressed concern internally about polymerization, either because of elevated temperatures or exposure to oxygen. Ex. 29 (John Tummons Email to Steven Smith); Ex. 30 (Chemical Calculations Spreadsheet); Ex. 27 (text message). On a second conference call on Sunday, February 5, with a separate team in Dallas, an OxyVinyls vice president, Wade Alleman, informed Smith (who then informed the contractors) that they did “not see an obvious sign of polymerization,” but critically that was only because the temperature readings (which, as explained above, were unreliable) did not show rapid increases. Ex. 8 (S. Smith Dep.) at 188:21-22, 159:23-162:13.

### **III. UNIFIED COMMAND’S DECISION TO VENT AND BURN**

The facts on the ground in East Palestine were consistent with the unambiguous and repeated warnings in OxyVinyls’s SDS that there was a serious risk that heat was causing the VCM in one or more of the derailed cars to polymerize, which could cause a BLEVE or increase the severity of a BLEVE that might occur for other reasons. It is common for emergency responders to rely on an SDS when responding to hazardous materials situations. Ex. 7 (McCarty Dep. Day 1) at 65:5-9. Indeed, that is the whole point: the SDS “is a very important document to first responders,” something they “rely on to give [them] information on how to react to the situations at hand.” Ex. 31 (NTSB Hrg. Day 2). at 420:17-19 (quoting East Palestine Fire Chief Keith Drabick).

Responders specifically had concerns about the risk of polymerization because the SDS referenced it as a potential hazard. Ex. 7 (McCarty Dep. Day 1) at 87:4-7; *see also* Ex. 5 (Day

Dep.) at 35:16-17, 39:25-40:3; Ex. 32 (Rockwell Dep.) at 86:21-87:7. Norfolk Southern contractors then received inconsistent advice from OxyVinyls, making them question OxyVinyls's "expert[ise] in their own product." Ex. 5 (Day Dep.) at 181:8-16. Faced with that inconsistent advice, the contractors reasonably "believed the SDS." *Id.* at 205:8-15. Responders, including expert contractors, thus relied on the information in the SDS in deciding how to respond. Ex. 7 (McCarty Dep. Day 1) at 83:2-87:7; Ex. 5 (Day Dep.) at 53:15-20.

Another variable in deciding whether to conduct a vent and burn, apart from the likelihood of a BLEVE occurring, is the likely severity of a BLEVE if it did occur. A BLEVE model received by Unified Command suggested that if a single VCM car were to explode, it would cause the surrounding VCM cars and other hazardous materials cars to explode in a chain reaction. Ex. 6 (Lunsford Opening Rep.) ¶ 100. The modeling suggested that such a reaction would have been devastating, with a high potential for loss of life. *Id.* ¶ 101; Ex. 19 (Lunsford Dep.) at 236:12-16. "[T]he modeling suggested that a vapor cloud explosion or BLEVE, and thermal radiation damage estimates would pose an unacceptable risk to the area." Ex. 3 (Hazmat Report) at 76. It was upon hearing about this BLEVE model that Stegmann, OxyVinyls's Vice President of Supply Chain, expressed concern that a one-mile evacuation could be insufficient. *See supra* Section III; *see also* Ex. 20 (Stegmann Dep.) at 83:13-84:3; Ex. 21 (Wood 30(b)(6) Dep.) at 78:5-79:2.

Ultimately, Unified Command concluded that a vent-and-burn was the safest option "for mitigating the potential for catastrophic tank failure." Ex. 3 (Hazmat Report) at 77. A vent and burn uses small charges to puncture holes in the tank cars to allow pressurized gas to burn off from the top and expel liquid from the bottom. Ex. 19 (Lunsford Dep.) at 300:22-301:1. The

vent and burn was executed effectively the afternoon of February 6, 2023, and resulted in no fatalities. Ex. 6 (Lunsford Opening Rep.) ¶ 201.

#### **IV. VCM DOES NOT POLYMERIZE SOLELY FROM EXPOSURE TO HEAT**

Contrary to the repeated warnings in OxyVinyls's SDS, as subsequently revealed to Norfolk Southern through extensive discovery in this case, heat alone does not cause VCM to polymerize. Ex. 33 (Tummons Dep.) at 147:12-22; Ex. 34 (Carroll Dep.) at 113:7-10. Dr. Geoffrey Coates, a professor of polymer chemistry at Cornell University, Ex. 35 (Coates Dep.) at 6:7-15, and Dr. Bryan Coughlin, a professor of polymer science at University of Massachusetts, Amherst, Ex. 36 (Coughlin Dep.) at 13:3-6, offered extensive evidence that VCM will not polymerize when exposed to excessive heat absent some initiator. Ex. 36 (Coughlin Dep.) at 84:20-23, 85:17-19; Ex. 12 (Coates Opening Rep.) ¶ 96; *see also* Ex. 35 (Coates Dep.) at 76:3-10, 82:18-84:12, 197:4-22, 261:23-25. In fact, VCM is stable absent an initiator at temperatures above 185 degrees, and those temperatures alone do not indicate polymerization. Ex. 33 (Tummons Dep.) at 66:5-18. OxyVinyls repeatedly admitted the same in depositions. “[C]ertainly to over a thousand degrees Fahrenheit VCM is stable and won’t polymerize just from heat.” Ex. 33 (Tummons Dep.) at 145:17-147:22; *see also id.* at 63:23-64:2, 163:18-164:23, 166:16-21; *see also* Ex. 24 (Brenon Dep.) at 96:17-97:5; Ex. 34 (Carroll Dep.) at 113:7-10.

#### **STANDARD OF REVIEW**

Summary judgment is proper where, as here, there is no genuine dispute as to any material fact with respect to a part of the movant’s claim. Fed. R. Civ. P. 56(a); *see also Schmid v. Bui*, 2021 WL 371713, at \*1 (N.D. Ohio Feb. 3, 2021) (citing *Johnson v. Karnes*, 398 F.3d 868, 873 (6th Cir. 2005)); *Bonasera v. New River Elec. Corp.*, 518 F. Supp. 3d 1136, 1152-1157 (S.D. Ohio 2021). A genuine factual dispute requires “‘significant probative evidence’ to show

that “there is more than some metaphysical doubt as to the material facts” at issue. *Blume v. Potter*, 289 F. App’x 99, 102 (6th Cir. 2008) (quoting *Moore v. Philip Morris Cos.*, 8 F.3d 335, 339-340 (6th Cir. 1993)). “Summary judgment is warranted when, viewing the facts in the light most favorable to the non-movant, no reasonable jury could find in her favor.” *Fleming v. Flaherty & Collins, Inc.*, 529 F. App’x 654, 657 (6th Cir. 2013).

### **ARGUMENT**

Under Ohio law, “[t]o recover on a negligence claim, a plaintiff must prove (1) that the defendant owed the plaintiff a duty, (2) that the defendant breached that duty, and (3) that the breach of the duty proximately caused the plaintiff’s injury.” *Shepherd v. Cincinnati*, 860 N.E.2d 808, 812 (Ohio Ct. App. 2006); *see also Rieger v. Giant Eagle, Inc.*, 138 N.E.3d 1121, 1156 (Ohio 2019). As a manufacturer and shipper of VCM, OxyVinyls was required by federal regulation to maintain an accurate SDS so that responders could accurately assess risks and respond appropriately, and because inaccurate information can exacerbate an already-dangerous emergency. OxyVinyls failed to exercise ordinary care by providing an inaccurate SDS for its VCM, in violation of those regulations. The decision to conduct a vent and burn was a proximate result of OxyVinyls’s breach.

#### **I. THERE IS NO GENUINE DISPUTE THAT OXYVINYLS NEGLIGENTLY PROVIDED A FACTUALLY WRONG SDS**

##### **A. OxyVinyls Had A Duty To Ensure The Information In Its SDS Was Accurate**

Ohio law holds that “a duty may be established through either the common law, legislative enactment, or the particular facts and circumstances of a case.” *Shepherd*, 860 N.E.2d at 812. A defendant owes a duty of care to classes of individuals who might foreseeably be harmed by the defendant’s conduct. *Cromer v. Children’s Hosp. Med. Ctr. of Akron*, 29 N.E.3d 921, 929 (Ohio 2015) (citing *Gedeon v. E. Ohio Gas Co.*, 190 N.E. 924 (Ohio 1934)). “The

common-law duty of due care is that degree of care which an ordinarily re[a]sonable and prudent person exercises, or is accustomed to exercising, under the same or similar circumstances.”

*Mussivand v. David*, 544 N.E.2d 265, 270 (Ohio 1989).

VCM is a federally recognized hazardous material under hazardous materials shipping regulations. 49 C.F.R. § 172.101, App. A. There is no dispute that OxyVinyls, as a shipper of hazardous materials, owes a duty of care to individuals and entities whose persons or properties are within a reasonable proximity of the rail line, including Plaintiffs in this case. 49 C.F.R. §§ 173 *et seq.*, 180 *et seq.*; Dkt. 430 at 40 (“OxyVinyls does not dispute that Plaintiffs have adequately alleged OxyVinyls had a duty to Plaintiffs and that it breached that duty.”). There is also no dispute that OxyVinyls, as a manufacturer of hazardous materials, owed a duty of care to all who might foreseeably come into contact with their VCM, again including Plaintiffs in this case. *See* 29 C.F.R. § 1920.1200(g). There is also no dispute that a reasonable manufacturer or shipper of hazardous materials would comply (and is accustomed to complying) with the federal regulations expressly intended to protect persons and property from those hazardous materials in the case of an emergency. Indeed, numerous courts, including this Court in this case, have held that “federal regulations ... create the federal standard of care” and preempt other potentially applicable standards of care under state law. *In re E. Palestine Train Derailment*, 2024 WL 1094616, at \*10 (N.D. Ohio Mar. 13, 2024); *see also Merritt v. BASF Corp.*, 2023 WL 3230983, at \*5 (S.D. Ohio May 3, 2023) (explaining that violations of federal regulations “could be admissible as evidence of negligence.” (quoting *Lang v. Holly Hill Hotel*, 909 N.E.2d 120, 125 (Ohio 2009))); *Tipton v. CSX Transp., Inc.*, 2016 WL 11501426, at \*18 (E.D. Tenn. July 7, 2016).

Two sets of federal regulations establish the relevant standards of care at issue here.

*First*, 49 C.F.R. § 172.602 requires that “[e]ach carrier who transports a hazardous material shall maintain,” among other items, “emergency response information ... that can be used in the mitigation of an incident involving hazardous materials.” *Id.* § 172.602(c)(1), (a). This information “must be immediately accessible to train crew personnel ... for use in the event of incidents involving hazardous materials.” *Id.* § 172.602(c)(1). That “emergency response information” must contain details about the “[r]isks of fire or explosion,” “[i]mmediate precautions to be taken in the event of an accident or incident,” and “[i]mmediate methods for handling fires.” *Id.* § 172.602(a)(3)-(5). Section 172.602(b)(3)(ii) specifies that “a material safety data sheet” is one way to present “the emergency response information required by this subpart.”

*Second*, 29 C.F.R. § 1910.1200(g) details a “chemical manufacturer[’s]” duty to create and maintain “a safety data sheet for each hazardous chemical they produce.” *Id.*

§ 1910.1200(g)(1); *see also* 29 C.F.R. §§ 1910.1200-1910.1201.3 This is the “emergency response information” and “material safety data sheet” that can fulfill a shipper’s duty under 49 C.F.R. §§ 172.600, 172.602(b)(3)(ii), and on which OxyVinyls relied in its bills of lading to nominally fulfill that duty, Ex. 37 (Bill of Lading) at 1, 5, 9, 13, 17. The regulation lays out a number of categories of

<sup>3</sup> The duties imposed under federal regulations governing an SDS “are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primary Revision 7.” 29 C.F.R. § 1910.1200(a)(1). In turn, Chapter 1.1.1 of the GHS (titled “Purpose”) explains that because chemicals have the “potential for adverse effects to people or the environment ... a number of countries or organizations have developed laws or regulations ... that require information to be prepared and transmitted to those using chemicals, through labels or safety data sheets (SDS).” Globally Harmonized System of Classification and Labelling of Chemicals (GHS), United Nations at 3 § 1.1.1 (2011), [https://unece.org/fileadmin/DAM/trans/danger/publi/ghs/ghs\\_rev04/English/ST-SG-AC10-30-Rev4e.pdf](https://unece.org/fileadmin/DAM/trans/danger/publi/ghs/ghs_rev04/English/ST-SG-AC10-30-Rev4e.pdf). “Provision of information ... allows the appropriate protective measures to be implemented in the local use settings.” *Id.*

information that manufacturers must include in the SDS and then provides appendices outlining the “specific content of each section of the safety data sheet.” 29 C.F.R. § 1910.1200(g)(2). Among the required categories are “Hazard(s) identification,” “Fire-fighting measures,” “Handling and storage,” and “Stability and reactivity.” *Id.* § 1910.1200(g)(2)(ii), (v), (vii), (x); SUF ¶ 8. The “Hazard identification” section specifically requires the manufacturer to signal certain hazards classified by the regulations and to “[d]escribe any hazards not otherwise classified.” *Id.* § 1910.1200, App. D, Table D.1, (2)(b)-(d). The “Fire-fighting measures” section specifically requires descriptions of “[s]pecific hazards arising from the chemical.” *Id.* § 1910.1200, App. D, Table D.1, (5)(b). The “Handling and storage” section specifically requires describing “[p]recautions for safe handling.” *Id.* § 1910.1200, App. D, Table D.1, (7)(a). And the “Stability and reactivity” section specifically requires descriptions of “[r]eactivity,” “[c]hemical stability,” “[p]ossibility of hazardous reactions,” and “[c]onditions to avoid.” *Id.* § 1910.1200, App. D, Table D.1, (10)(a)-(d).

Of course, the information conveyed in the SDS must be accurate and up to date so that it is useful to emergency responders and does not exacerbate hazardous material incidents. The regulations expressly impose this requirement: “The chemical manufacturer ... preparing the safety data sheet shall ensure that the information provided accurately reflects the scientific evidence used in making the hazard classification,” and must promptly update the SDS if it “becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards.” 29 C.F.R. § 1910.1200(g)(5).

In sum, there is no genuine dispute that OxyVinyls, as the manufacturer and shipper of VCM, SUF ¶ 6, owed a duty of care to provide an accurate SDS suitable for use by emergency responders. Summary judgment is appropriate as to this element.

**B. OxyVinyls Breached Its Duty By Providing A Factually Wrong SDS**

**1. OxyVinyls's SDS repeatedly and unequivocally states that polymerization can occur if VCM is exposed to heat**

OxyVinyls's federally mandated SDS clearly and repeatedly states that VCM is capable of polymerization when exposed to heat. The "Hazards Identification" section of the SDS begins on the second page with a subsection titled "Emergency Overview." In that section, the SDS provides the following warning in all capital letters:

**PHYSICAL HAZARDS: MAY MASS EXPLODE IN FIRE. EXTREMELY FLAMMABLE GAS. CONTAINS GAS UNDER PRESSURE, MAY EXPLODE IF HEATED. POLYMERIZATION CAN OCCUR.**

Ex. 1 (SDS) at 2. That warning is followed by a "**PRECAUTIONARY STATEMENT[]**" to "[k]eep away from heat/ sparks/ open flames/ hot surfaces - No smoking." *Id.* The "Stability and Reactivity" section begins by stating that, while VCM is "[g]enerally stable at normal temperatures and pressures," it "may violently polymerize or generate other hazardous conditions when not stabilized and/or stored correctly." *Id.* at 10. The very next paragraph repeats the risk of polymerization from heat, specifying that "[e]xplosive or violent polymerization can occur when exposed to air, sunlight, *or excessive heat* if not properly stabilized," and the next paragraph lists other hazardous reactions "[i]n addition to violent polymerization." *Id.* (emphasis added). The section closes by repeating the unambiguous warning that heat can lead to dangerous polymerization, using a bolded and underlined heading:

**Hazardous Polymerization:** Polymerization can occur. Exposure to the following conditions or mixtures with the following elements and materials can cause *explosive or violent polymerization* of VCM: Air, Sunlight, *Excessive heat*, Oxidizers, Catalytic metals, such as copper, aluminum and their alloys and certain catalytic impurities. *Avoid elevated temperatures*, oxidizing agents, oxides of nitrogen, oxygen, peroxides, other polymerization catalysts/initiators, air and sunlight.

*Id.* (emphasis added). In the “Fire-Fighting Measures” section, the SDS begins by stating that “[c]ontainers may rupture or explode if exposed to heat.” *Id.* at 5.

**2. *OxyVinyls’s SDS was factually wrong because VCM does not polymerize from exposure to heat***

OxyVinyls’s SDS and its numerous references to the risk of polymerization from heat were flatly incorrect, as discovery in this case has indisputably revealed. VCM does not polymerize from heat alone. Ex. 35 (Coates Dep.) at 76:3-10; 82:18-84:12; 197:4-22; 261:23-25. For example, “if there was oxygen and that oxygen made a polyperoxide, and then that substance was heated in the presence of vinyl chloride monomer,” then polymerization could occur. *Id.* at 79:4-9. But polymerization will not occur where there is no initiator, regardless of whether it is exposed to heat. *Id.* at 83:16-84:1. Dr. Coates thus concluded that “OxyVinyls’s VCM SDS inaccurately warns that VCM can polymerize when exposed to excessive heat.” Ex. 12 (Coates Opening Rep.) ¶ 97. OxyVinyls’s SDS therefore did not “accurately reflect[] the scientific evidence.” 29 C.F.R. § 1910.1200(g)(f).

The parties agree on this point. John Brenon, Senior Vice President of Manufacturing at OxyVinyls, testified that VCM would “not polymerize” even with “elevated temperatures” and that he disagreed with the statement in the SDS indicating that “excessive heat can cause explosive or violent polymerization.” Ex. 24 (Brenon Dep.) at 96:17-97:10, 98:24-99:1. John Tummons, Technology Director at OxyVinyls similarly testified that “[p]olymerization of VCM will not occur with just thermal initiation,” and that he was “not aware of any way to polymerize VCM solely with temperature.” Ex. 33 (Tummons Dep.) at 63:23-64:2, 166:16-21.

The parties thus agree that (1) OxyVinyls’s SDS repeatedly and unambiguously warned that VCM could polymerize when exposed to heat but (2) VCM in fact cannot polymerize when exposed to heat alone. There is no genuine dispute that OxyVinyls breached its duty to provide

an accurate SDS. Summary judgment should therefore be granted for Norfolk Southern on the element of breach.

## **II. OXYVINYLS’S NEGLIGENCE WAS A PROXIMATE CAUSE OF THE VENT AND BURN**

A defendant’s negligence proximately causes an injury where it is a “substantial factor in bringing about [the] injury,” and where “the injury would not have occurred” but for the defendant’s negligence. *Hardwick v. 3M Co.*, 2019 WL 4757134, at \*16 (S.D. Ohio Sept. 30, 2019). Negligence is a “proximate cause,” *i.e.*, a substantial factor in bringing about the injury, if “the injury is a natural and foreseeable result” of that negligence. *Brott Mardis & Co. v. Camp*, 768 N.E.2d 1191, 1194 (Ohio Ct. App. 2001). Under Ohio law, “there [can] be more than one proximate cause of a particular injury.” *In re Nat’l Prescription Opiate Litig.*, 440 F. Supp. 3d 773, 795 (N.D. Ohio 2020) (quoting *Taylor v. Webster*, 231 N.E.2d 870, 873 (Ohio 1967)). A “plaintiff does not need to disprove all other possible causes to prevail when facts are established from which an inference of negligence can be drawn.” *Lubanovich v. McGlocklin*, 2014 WL 2567995, at \*2 (Ohio Ct. App. June 9, 2014).

Norfolk Southern’s recommendation to Unified Command to conduct the vent and burn was the foreseeable and actual result of OxyVinyls’s repeated and false warnings in the SDS that heat could lead to polymerization and explosion. The SDS is a core source of information for emergency responders in a hazardous material incident. And the tank cars containing OxyVinyls’s VCM were all exposed to the exact conditions that the SDS warned could lead to polymerization: fire and excessive heat. No reasonable jury could conclude that the SDS, with its warnings about precisely this situation, was not a proximate cause of the decision to conduct a vent and burn.

*First*, it was foreseeable that emergency responders would rely on the SDS’s warning that heat can cause VCM to polymerize. As this Court has recognized, “if an emergency

involving those [hazardous] materials were to occur, timely and accurate information about those materials to prevent a catastrophic explosion would be needed.” *In re E. Palestine*, 2024 WL 1094616, at \*16. Federal regulations meet that foreseeable need by requiring shippers of hazardous materials to provide “‘emergency response information’ ... that can be used in the mitigation of an incident involving hazardous materials.” 49 C.F.R. § 172.602(a); *see also* 2020 Emergency Response Guidebook, *U.S. Dep’t of Trans.*, 4 (2020 ed.) (referring to safety data sheet for hazard identification references). OxyVinyls relied on its SDS to meet this regulatory obligation and specifically provided the SDS to emergency responders after the derailment precisely so the information contained in that SDS could inform their decisions. Ex. 7 (McCarty Dep. Day 1) at 65:5-9. Moreover, the broader purpose of the SDS, even when it is not used to meet a shipper’s obligations under 49 C.F.R. § 172.602(a), is to provide reliable information in any number of contexts, including emergency response. *See supra* n.2 (discussing similar purpose of 29 C.F.R. § 1910.1200(g)); *Midwest Specialties, Inc. v. Crown Indus. Prods. Co.*, 940 F. Supp. 1160, 1163 n.1 (N.D. Ohio 1996) (“Federal law requires the manufacturer to develop the [Material Safety Data Sheet] ... [and] it is customary in the trade for manufacturers to provide MSDS’s to downstream purchasers, and for those downstream purchasers to rely on the information contained therein.”).

The governing regulations account for the foreseeable fact that an emergency response team does not have time to independently research potential chemical reactions and parse complex safety information. Instead, and consistent with the express regulatory purpose of the SDS, emergency responders rely on the SDS to provide actionable information that can guide their decision-making. *See* 49 C.F.R. § 172.602 (providing that an SDS is a document that contains “information that can be used in the mitigation of an

incident involving hazardous materials”); *see also id.* § 172.602(a)(3), (4) (mandating that the information must include: “[r]isks of fire or explosion; [i]mmediate precautions to be taken in the event of an accident”); Ex. 7 (McCarty Dep. Day 1) at 65:5-9 (“Q. In your field and in your experience, is it commonplace for you to use or reference an SDS in responding to a HAZMAT incident? A. Yes.”). As East Palestine Fire Chief Drabick, Incident Commander, testified:

This is a very important document to first responders. This is something that we rely on to give us information on how to react to the situations at hand. ... How are we supposed to do our job effectively if all the information that you have isn't in the documents that you provide us to do our job?

Ex. 31 (NTSB Hrg. Day 2) at 420:17-23. As the chemical manufacturer and shipper for the VCM in all five cars, SUF ¶ 6, *only* OxyVinyls could be relied on to provide accurate information about its product, and the central means of communicating that information was the SDS.

It was thus foreseeable that Norfolk Southern contractors and others would rely on the SDS: the entire regulatory purpose of the SDS is to provide truthful, accurate, and reliable information to be used during emergency responses; that is in fact how SDSs are regularly used; and that is precisely why OxyVinyls provided the SDS to responders after the derailment.

*Second*, it was likewise foreseeable that emergency responders who believed the SDS's warning that heat could lead to catastrophic polymerization would decide to conduct a vent and burn rather than risk a BLEVE. Responders to emergency hazardous material derailments have only a finite set of options for removing derailed tank cars—and a vent and burn is among those well-known, limited choices. Ex. 38 (McCarty Dep., Ex. 14) at 39; Ex. 6 (Lunsford Opening Rep.) ¶¶ 49-57, 161-201; Ex. 17 (Lunsford Rebuttal Rep.) ¶ 42 (describing the various options and explaining why a vent and burn was the only available

one). As this Court has recognized, “the FRA considers the vent and burn method to be a foreseeable consequence in the event of an emergency.” *In re E. Palestine*, 2024 WL 1094616, at \*16 (citing *Handbook for Vent and Burn Method of Field Product Removal*, U.S. Dep’t of Transp. (May 1994), <https://railroads.dot.gov/elibrary/handbook-vent-and-burn-method-field-product-removal> (last visited October 9, 2024)).

It is also well understood that a vent and burn, while the last choice, is the safest choice when there is a risk of catastrophic explosion. Ex. 7 (McCarty Dep. Day 1) at 298:19-299:16; Ex. 6 (Lunsford Opening Rep.) ¶ 201; Ex. 19 (Lunsford Dep.) at 131:21-132:2. The vent and burn “was the best decision for the safety of the emergency responders and for the safety of the residents and the businesses” and “the consequences of not performing a vent and burn,” would “have been a catastrophic failure of a tank car, which could have destroyed the Village of East Palestine.” Ex. 19 (Lunsford Dep.) at 199:21-200:7, 236:6-16. As McCarty further testified, “NS staff, the contractor staff, ... considered every tactical option possible and kept getting back to vent and burn as the safest approach.” Ex. 7 (McCarty Dep. Day 1) at 299:11-16.

*Finally*, there is no genuine dispute that these foreseeable events in fact occurred: contractors believed the SDS’s warnings that heat could lead to polymerization, and they in turn relied on that information to determine that a vent and burn was the safest response.

Contractors on the scene and responding to the derailment had concerns about polymerization because the Oxy Vinyls SDS referenced polymerization as a potential hazard. Ex. 3 (Hazmat Report) at 17-20. The responding contractors dealt with “vinyl chloride as a polymerizable material” because “the SDS show[ed] that ... polymerization can occur.” Ex. 5 (Day Dep.) at 39:25-40:4. These responders relied on the SDS to determine how to

respond to the emergency situation at hand. Ex. 5 (Day Dep.) at 53:11-20. When faced with what responders were seeing on the ground—five tank cars full of VCM that were surrounded by pool fires, the only reliable measurement showing frighteningly high temperatures even after those fires had died out, and PRDs that were no longer functioning—responders turned to the SDS to determine the best course of action. Ex. 7 (McCarty Dep. Day 1) at 83:2-87:7. Because the SDS had “repeated references” stating that the VCM “could violently polymerize and violently explode,” responders were left to believe that there was a real risk that the VCM was polymerizing and a BLEVE could be imminent. Ex. 7 (McCarty Dep. Day 1) at 87:4-7; *see also* Ex. 5 (Day Dep.) at 39:25-40:4; Ex. 32 (Rockwell Dep.) at 86:21-87:7.

A reasonable jury could only conclude that Norfolk Southern contractors and the Unified Command team relied on the SDS’s warning that heat could lead to polymerization and explosion. *See* Ex. 5 (Day Dep.) at 53:11-20; Ex. 32 (Rockwell Dep.) at 86:21-87:7; Ex. 7 (McCarty Dep. Day 1) at 87:4-7.

There is thus no genuine dispute that the inaccurate SDS was a proximate cause of the decision to vent and burn. There may be *additional* proximate causes of the vent-and-burn, such as GATX’s negligent maintenance of the wheel bearing on its car that caused the derailment in the first place. Apportionment of fault can be determined at trial. But no evidence at trial can erase the unambiguous warnings on the SDS, the consensus that those warnings are inaccurate, or the foreseeable and actual effect of those false warnings on the decision to conduct the vent and burn.

### **III. OXYVINYLS’S NEGLIGENCE INJURED NORFOLK SOUTHERN**

There is no genuine dispute of material fact on the element of injury. Norfolk Southern is seeking to recover from OxyVinyls that portion of damages owed to Plaintiffs, beyond Norfolk

Southern's share of any liability. Plaintiffs allege that their damages arose in large part from the vent and burn. *See, e.g.*, Dkt. 138 ¶¶ 1, 4, 7, 10, 14, 17, 154, 186-188, 305. The settlement resolves those claims. *See* Settlement Agreement, Dkt. 452-2 at 2 § I.D; *id.* at 9 § II.AA; *id.* at 11 § II.MM. If not for OxyVinyls's negligence, Plaintiffs' alleged harm as a result of the vent and burn would not have occurred.

Norfolk Southern's Third-Party Complaint was expressly pled under the third-party impleader rule, Rule 14(a), which permits claims for derivative liability. "Rule 14 permits actions against a nonparty who is or may be liable ... for all or part of the claim against it. ... Accordingly, third-party claims are permissible when they are dependent on the result of the main claim." *A.W. v. Best W. Int'l, Inc.*, 2024 WL 1340264, at \*4 (S.D. Ohio Mar. 29, 2024) (citation and quotation marks omitted). This Court acknowledged the scope of Norfolk Southern's claims in its order on the motion to dismiss, explaining that "Norfolk Southern seeks to ensure that [the Railcar Defendants] pay their proportionate share of the common liability for any recoverable personal and property damages alleged by the various classes of private plaintiffs who initiated the present case." Dkt. 429 at 45.

In accordance with Rule 14, Norfolk Southern's damages in this action are contingent on liability to Plaintiffs. The finally-approved \$600 million settlement with Plaintiffs resolves the claims between Plaintiffs, Norfolk Southern, and third-party defendants—including, expressly, OxyVinyls—and this Court determined that the settlement was fair, adequate, and reasonable. Dkt. 557 at 4 ("The relief provided for in the Settlement Fund and Settlement Agreement is fair, adequate, and reasonable."). Under the settlement, now approved by this Court's final judgment, Norfolk Southern is obligated to discharge the whole of the common liability to Plaintiffs and the settlement class for a total amount of \$600 million. OxyVinyls is liable to

Norfolk Southern for the share of that settlement amount proportionate to its fault. Norfolk Southern thus seeks to have OxyVinyls pay its fair share—as the party that negligently caused the vent and burn but has been completely absent from East Palestine and the surrounding community since then.

There is no genuine issue of fact regarding whether OxyVinyls has caused Norfolk Southern harm. Summary judgment is appropriate, leaving for trial as between Norfolk Southern and OxyVinyls only the issue of the appropriate allocation of fault.

### **CONCLUSION**

Norfolk Southern respectfully requests that this Court grant its motion for partial summary judgment against OxyVinyls LP.

Dated: October 9, 2024

Respectfully submitted,

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/s/ Alan Schoenfeld

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**CERTIFICATION OF WRITTEN REQUEST FOR JUDGMENT OR DISMISSAL**

I certify that on September 24, 2024, pursuant to requirements set out in Dkt. 98 ¶ 18, Norfolk Southern submitted a written request for partial judgment to OxyVinyls. OxyVinyls replied on September 25, 2024, and refused to agree to judgment. Norfolk Southern maintains it is entitled to partial summary judgment.

/s/ Alan Schoenfeld

ALAN SCHOENFELD

**CERTIFICATE OF LOCAL RULE 7.1 COMPLIANCE**

I certify that this Memorandum adheres to the page limitations set forth in the Local Rule 7.1(f) for mass-tort cases because it does not exceed 40 pages in length.

/s/ Alan Schoenfeld

ALAN SCHOENFELD

**CERTIFICATE OF SERVICE**

I hereby certify that on October 9, 2024, I caused a copy of the foregoing to be filed with the Clerk of the Court using the Court's CM/ECF electronic filing system, which will provide electronic notice to all counsel of record.

/s/ Alan Schoenfeld

ALAN SCHOENFELD